

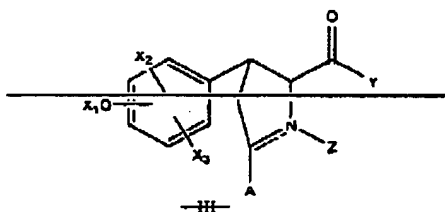
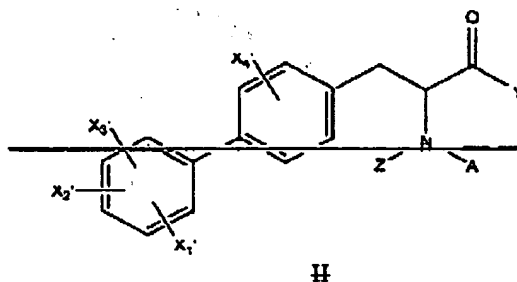
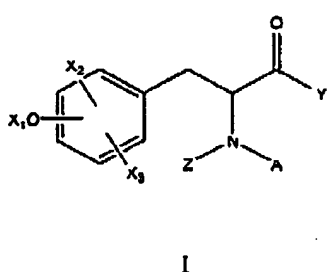
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Listing of Claims:

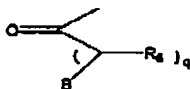
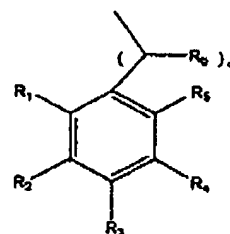
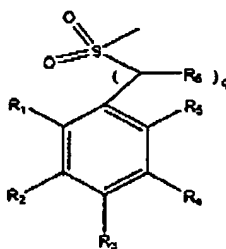
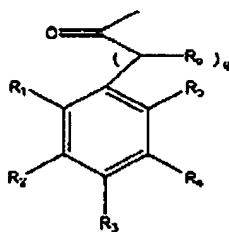
1. (currently amended) A compound of the formula I, II or III:



wherein

Z is H or lower alkyl;

A has the structure:



in which

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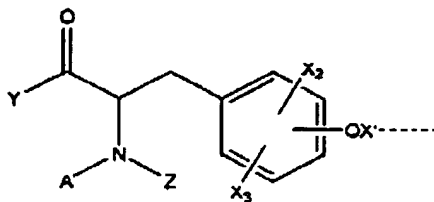
B is cyanoalkyl, a carbocycle or a heterocycle optionally substituted with one or more R_1 substituents;

q is 0-3;

R_1 , R_2 , R_3 , R_4 , R_5 and R_6 independently are hydrogen, alkyl, amino, alkylamino, dialkylamino, nitro, urea, cyano, thio, alkylthio, hydroxy, alkoxy, alkoxyalkyl, alkoxy carbonyl, alkoxy carbonylamino, aryloxy carbonylamino, alkylsulfinyl, sulfonyl, alkylsulfonyl, aralkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, alkanoyl, alkanoylamino, cycloalkanoylamino, aryl, arylalkyl, halogen, or alkylphosphonyl, and R_1 , R_2 , R_3 , R_4 and R_5 are substituted with 0-3 substituents selected from the group consisting of hydroxy, carboxyl, lower alkoxy carbonyl, lower alkyl, nitro, oxo, cyano, carbocyclyl, heterocyclyl, heteroaryl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkanoylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, aryl, aroyl, heterocyclyl carbonyl, halogen and lower alkylphosphonyl; or two of R_1 to R_5 together form a carbocycle or heterocyclic ring.

Y is H, alkoxy, alkoxyalkoxy, aryloxy, alkylaminoalkoxy, dialkylaminoalkoxy, alkylamino, arylamino, heterocyclyl or heteroarylalkyl, where each of the forgoing may be substituted or unsubstituted;

X_1 is H, $C(O)OR$, $C(O)NRaRb$, $C(O)R$, or $C(O)SR$ wherein R, Ra and Rb, individually, is hydrogen or alkyl, alkoxy, aryl, heterocyclyl, heteroaryl, substituted with 0-4 substituents selected from the group consisting of halogen, hydroxy, amino, carboxyl, nitro, cyano, heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, aralkyl, aralkyloxy, aryloxy carbonyl, aralkyloxy carbonyl, alkylenedioxy, lower alkoxy carbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroaryl amino lower alkyl, halo lower alkyl, and alkoxy lower alkyl; wherein said heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, aralkyl, aralkyloxy, aryloxy carbonyl and aralkyloxy carbonyl substituent is optionally substituted with halogen, hydroxyl, amino, carboxyl, nitro, cyano, alkyl and alkoxy; and wherein Ra and Rb together with the nitrogen to which they are attached ~~may~~ form a heterocyclyl or heteroaryl group substituted with 0-5 substituents R or Rd; wherein Rd has the structure



wherein X' is a divalent linker selected from the group consisting of $C(O)NRa$, $C(O)$ or a bond;

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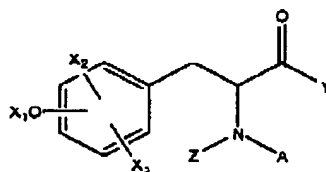
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X_2 and X_3 are each independently hydrogen, halogen, hydroxy, amino, carboxyl, nitro, cyano, or substituted or unsubstituted alkyl, aryl, heterocyl, heteroaryl, aryl, aroyl, aryloxy, alkylenedioxy, lower alkyl carbonylamino, lower alkenyl carbonylamino, aryl carbonylamino, arylalkyl carbonylamino, lower alkoxy carbonylamino, lower alkylamino carbonylamino, arylamino carbonylamino, lower alkoxy carbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroaryl amino lower alkyl, halo lower alkyl, alkoxy lower alkyl; and wherein X_1 and X_2 or X_3 may be bonded together to form a heterocyclic or heteroaryl ring(s); or X_3 and Z together form a heterobicyclic ring;

~~X_1 , X_2 , X_3 and X_4 are each independently hydrogen, halogen, hydroxy, amino, carboxyl, nitro, cyano, or substituted or unsubstituted alkyl, alkenyl, alkynyl, arylalkyl, heterocyl, heteroaryl, aryl, aroyl, aryloxy, alkylenedioxy, lower alkyl carbonylamino, lower alkenyl carbonylamino, aryl carbonylamino, arylalkyl carbonylamino, lower alkoxy carbonylamino, lower alkylamino carbonylamino, arylamino carbonylamino, lower alkoxy carbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroaryl amino lower alkyl, halo lower alkyl, alkoxy lower alkyl;~~
or a pharmaceutically acceptable salt thereof.

2. (currently amended) A compound according to claim 1, having the formula:



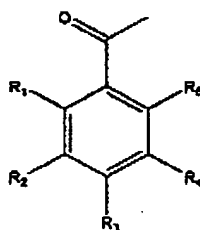
I

wherein

Z is H or lower alkyl;

A has the structure:

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in which R_1 , R_2 , R_3 , R_4 and R_5 , independently are hydrogen, alkyl, amino, alkylamino, dialkylamino, nitro, cyano, thio, alkylthio, hydroxy, alkoxy, alkoxyalkyl, alkoxycarbonyl, alkylsulfinyl, sulfonyl, alkylsulfonyl, alkanoyl, aryl, arylalkyl, halogen, or alkylphosphonyl, and R_1 , R_2 , R_3 , R_4 and R_5 are substituted with 0-3 substituents selected from the group consisting of hydroxy, carboxyl, lower alkoxycarbonyl, lower alkyl, nitro, cyano, heterocyclyl, heteroaryl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, aryl, halogen and lower alkylphosphonyl;

Y is H, alkoxy, alkoxyalkoxy, aryloxy, aminoalkylalkoxy, diaminoalkylalkoxy, alkylamino, arylamino, heterocyclyl or heteroarylalkyl, where each of the forgoing may be substituted or unsubstituted;

X_1 is H, $C(O)OR$, $C(O)NRaRb$, $C(O)R$, or $C(O)SR$ wherein R, Ra and Rb, individually, is hydrogen or alkyl, aryl, heterocyclyl, heteroaryl, substituted with 0-4 substituents selected from the group consisting of halogen, hydroxy, amino, carboxyl, nitro, cyano, heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, alkylenedioxy, lower alkoxycarbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroarylamino lower alkyl, halo lower alkyl, alkoxy lower alkyl; and wherein Ra and Rb together with the nitrogen to which they are attached may form a heterocyclyl or heteroaryl group substituted with 0-4 substituents R;

X_2 and X_3 are each independently hydrogen, halogen, hydroxy, amino, carboxyl, nitro, cyano, or substituted or unsubstituted alkyl, aryl, heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, alkylenedioxy, lower alkyl carbonylamino, lower alkenyl carbonylamino, aryl carbonylamino, arylalkyl carbonylamino, lower alkoxy carbonylamino, lower alkylamino carbonylamino, arylamino carbonylamino, lower alkoxycarbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower

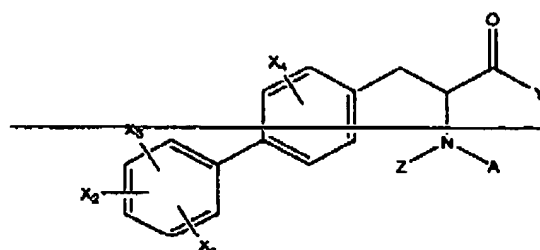
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alkylphosphonyl, aminosulfonyl lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroarylamino lower alkyl, halo lower alkyl, alkoxy lower alkyl; and wherein X_1 and X_2 or X_3 may be bonded together to form a heterocyclic or heteroaryl ring(s);

or

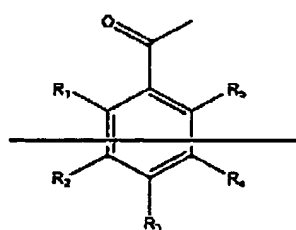


II

wherein

— Z is H or lower alkyl;

— A has the structure:



in which R_1 , R_2 , R_3 , R_4 , and R_5 , independently are hydrogen, alkyl, amino, alkylamino, dialkylamino, nitro, cyano, thio, alkylthio, hydroxy, alkoxy, alkoxyalkyl, alkoxy carbonyl, alkylsulfinyl, sulfonyl, alkylsulfonyl, alkanoyl, aryl, arylalkyl, halogen, or alkylphosphonyl, and R_1 , R_2 , R_3 , R_4 , and R_5 are substituted with 0-3 substituents selected from the group consisting of hydroxy, carboxyl, lower alkoxy carbonyl, lower alkyl, nitro, cyano, heteroaryl, heteroaryl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, aryl, halogen and lower alkylphosphonyl;

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~~Y is H, alkoxy, alkoxyalkoxy, aryloxy, aminoalkylalkoxy, diaminoalkylalkoxy, alkylamino, arylamino, heterocyclyl or heteroarylalkyl, where each of the foregoing may be substituted or unsubstituted;~~

~~X₁, X₂ and X₃ are each independently hydrogen, halogen, hydroxy, amino, carboxyl, nitro, cyano, or substituted or unsubstituted alkyl, alkenyl, alkynyl, arylalkyl, heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, alkylenedioxy, lower alkyl carbonylamino, lower alkenyl carbonylamino, aryl carbonylamino, arylalkyl carbonylamino, lower alkoxy carbonylamino, lower alkylamino carbonylamino, arylamino carbonylamino, lower alkoxy carbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl, lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroaryl amino lower alkyl, halo lower alkyl, alkoxy lower alkyl; or a pharmaceutically acceptable salt thereof.~~

3. (canceled)

4. (canceled)

5. (currently amended) The compound of ~~one of~~ claims 2, wherein X₁ is C(O)NRaRb wherein Ra and Rb together with the nitrogen to which they are attached form a heterocyclyl or heteroaryl group substituted with 0-5 substituents selected from the group consisting of hydrogen, alkyl, alkoxy, aryl and R; wherein R is hydrogen or alkyl, alkoxy, aryl, heterocyclyl or heteroaryl, substituted with 0-4 substituents selected from the group consisting of halogen, hydroxy, amino, carboxyl, nitro, cyano, heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, aralkyl, aralkyloxy, aryloxy carbonyl, aralkyloxy carbonyl, alkylenedioxy, lower alkoxy carbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl, lower alkyl, hydroxy lower alkyl, alkylsulfinyl lower alkyl, alkylsulfonyl lower alkyl, alkylthio lower alkyl, heteroarylthio lower alkyl, heteroaryloxy lower alkyl, heteroaryl amino lower alkyl, halo lower alkyl, and alkoxy lower alkyl; wherein said heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, aralkyl, aralkyloxy, aryloxy carbonyl and aralkyloxy carbonyl substituent is optionally substituted with halogen, hydroxyl, amino, carboxyl, nitro, cyano, alkyl and alkoxy; and X₂, X₃ are each independently H, alkyl, alkenyl, alkynyl, aryl, arylalkyl, heterocyclyl, or heteroaryl.

6. (currently amended) The compound of claim 5, wherein X₁ is C(O)OR, C(O)R, or C(O)SR and R is heterocyclyl or heteroaryl, substituted with 0-4 substituents selected from the group consisting of

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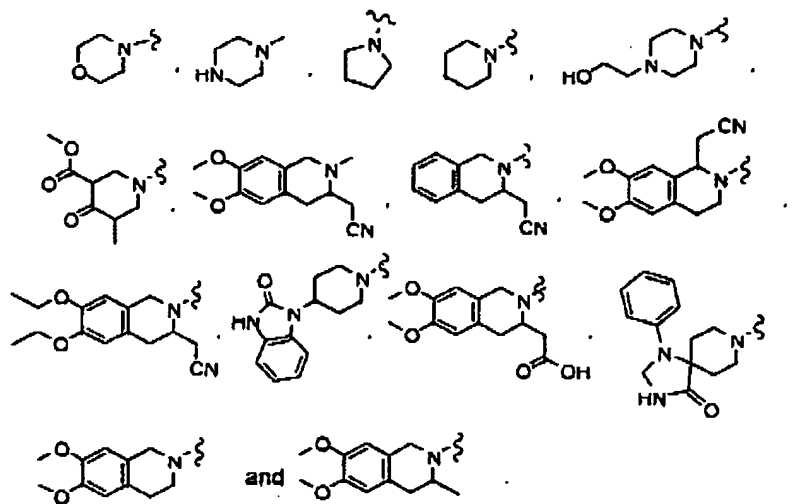
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halogen, hydroxy, amino, carboxyl, nitro, cyano, heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, aralkyl, aralkyloxy, aryloxycarbonyl, aralkyloxycarbonyl, alkylenedioxy, lower alkoxycarbonyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkylthio, lower alkoxy, lower alkylamino, lower alkylsulfinyl, lower sulfonyl, lower alkylsulfonyl, lower alkanoyl, lower alkylphosphonyl, aminosulfonyl, lower alkyl, hydroxy lower alkyl, alkylsulfinyl, lower alkyl, alkylsulfonyl, lower alkyl, alkylthio, lower alkyl, heteroarylthio, lower alkyl, heteroarylloxy, lower alkyl, heteroarylamino, lower alkyl, halo lower alkyl, and alkoxy lower alkyl; wherein said heterocyclyl, heteroaryl, aryl, aroyl, aryloxy, aralkyl, aralkyloxy, aryloxycarbonyl and aralkyloxycarbonyl substituent is optionally substituted with halogen, hydroxyl, amino, carboxyl, nitro, cyano, alkyl and alkoxy.

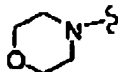
7. (canceled)

8. (canceled)

9. (currently amended) The compound of claim 5, wherein X_1 is $C(O)NRaRb$ and Ra and Rb together form a heterocyclyl group ~~is a member~~ selected from the group consisting of



10. (currently amended) The compound of claim 9, wherein X_1 is Ra and Rb together form the heterocyclyl group



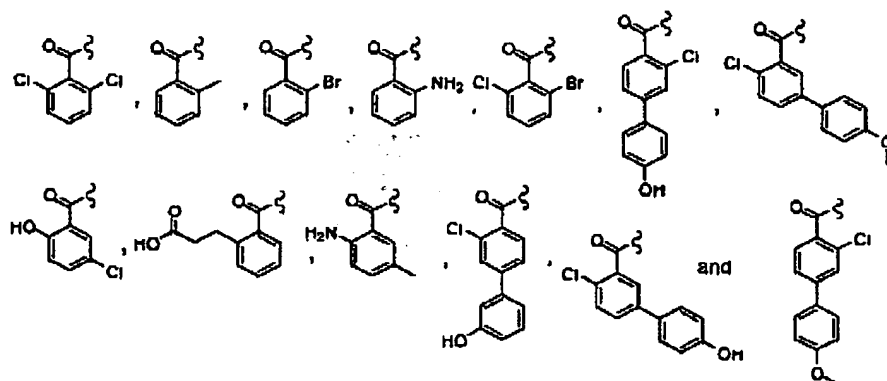
11. (canceled)

12. (canceled)

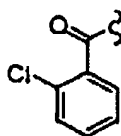
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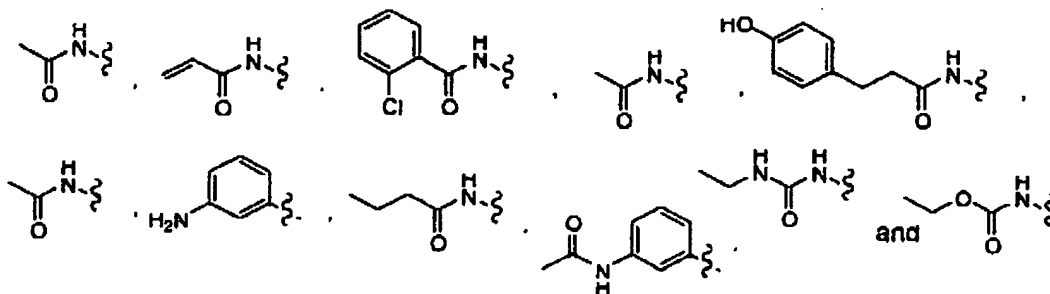
13. (currently amended) The compound of claim 1, wherein R_1 , R_3 or both are not hydrogen.
14. (currently amended) The compound of claim 1, wherein X_2 , X_3 , and Z ~~or a combination thereof~~ are hydrogen.
15. (original) The compound of claim 1, wherein A is selected from the group consisting of



16. (original) The compound of claim 1, wherein A is



17. (original) The compound of claim 1, wherein X_2 is a member selected from the group consisting of

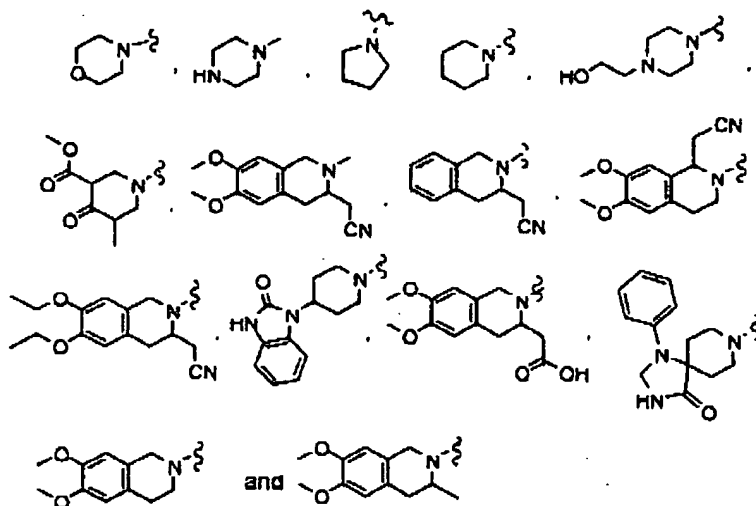


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18. (original) The compound of claim 1, wherein the compound has S stereochemical configuration.
19. (original) A composition, comprising the compound of claim 1 and a carrier or excipient.
20. (canceled)
21. (canceled)
22. (canceled)
23. (canceled)
24. (canceled)
25. (new) The compound of claim 2, wherein X_1 is $C(O)NRaRb$ and Ra and Rb together form a heterocyclyl group selected from the group consisting of

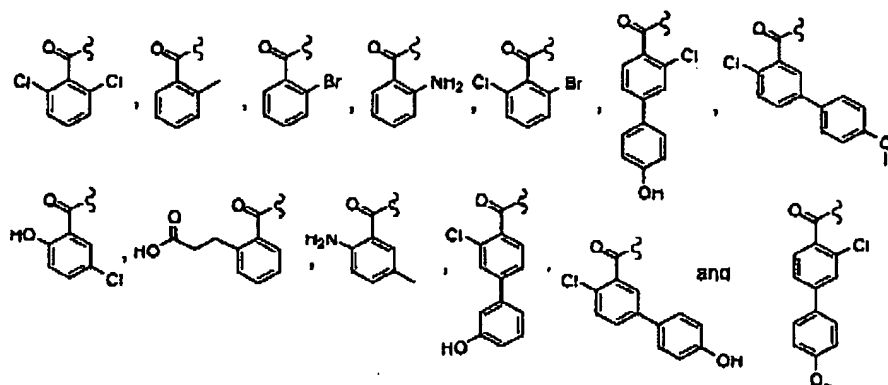


and

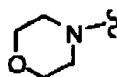
A is selected from the group consisting of

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26. (new) The compound of claim 25, wherein Z, X₂ and X₃ are each H.
27. (new) The compound of claim 26, wherein Y is OH, alkoxy, aryloxy or arylalkoxy.
28. (new) The compound of claim 27, wherein Ra and Rb together form the heterocyclyl group



29. (new) The compound of claim 28, wherein A is

